REMARKS

I. Introduction

By the present Amendment, claims 1-5 and 11 have been amended. No claims have been added or cancelled. Accordingly, claims 1-13 remain pending in the application. Claims 1-3, 5, and 11 are independent.

II. Office Action Summary

In the Office Action of September 30, 2005, claims 1-3 and 12 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,486,853 issued to Yoshinomoto et al. ("Yoshinomoto"). Claims 5-7 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application 2003/0190896 A1 published to Ota, et al. ("Ota") in view of U.S. Patent 6,058,315 issued to Clark. Claims 8-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ota in view of Clark, and further in view of Yoshinomoto. These rejections are respectfully traversed.

The Examiner's indication that claims 4 and 11 would be allowable if rewritten in independent form to include all the limitations of the base claim and any intervening claims, is noted with appreciation.

III. Rejections Under 35 USC §102

Claims 1-3 and 12 were rejected under 35 U.S.C. §102(b) as being anticipated by Yoshinomoto. Regarding this rejection, the Office Action asserts that Yoshinomoto discloses a surface mount chip antenna that comprises a base made of a dielectric and at least one terminal portion provided on the mounted surface of the base. The Office Action further indicates that the surface mount chip includes a concave provided in the mounted surface of the base except in the terminal portion.

With regards to claim 2, the Office Action alleges that Yoshinomoto discloses a flat and rectangular conductive wire spirally wound in the concave. Regarding claim 3, the Office Action alleges that Yoshinomoto discloses a chip antenna having certain dimensions encompassing those recited in the claimed invention, and the depth of the concave being no more than ½ the thickness of the base. Further, the Office Action asserts that the rectangular conductive wire of Yoshinomoto is 2mm or less in width and 0.01 to 0.2 mm in thickness. Applicants respectfully disagree with these assertions.

Independent claim 1 has been amended to incorporate the subject matter previously recited in claims 2 and 3. As amended, independent claim 1 defines a surface mount chip antenna that comprises:

> a base made of a dielectric, magnetic substance or mixture thereof, at least one terminal portion provided on the mounted face of said base, a concave provided in the mounted face of said base except in said terminal portion, and at least one flat and rectangular conductive wire wound around said base,
>
> wherein the base of said chip antenna is 5 mm or less in thickness and 30 mm or less in length, the depth of the concave is not more than ½ of the thickness of said base, and
> said flat and rectangular conductive wire is 0.5 to 2 mm in width and 0.05 and 0.2 mm in thickness.

According to independent claim 1, the chip antenna comprises a base made of a dielectric, magnetic substance or mixture thereof. At least one terminal portion is provided on the mounted face of the base. A concave region is provided in the mounted face of the base except in the terminal portion. At least one flat and rectangular conductive wire is wound around the base. Further, the base of the chip antenna is 5mm or less in thickness and 30mm or less in length. The depth of the concave is selected to be no more than one half of the thickness of the base.

Additionally, the conductive wire has dimensions of 0.5mm to 2mm in width and 0.05 mm to 0.2 mm in thickness.

The Office Action first asserts that Yoshinomoto discloses a surface mount chip antenna that includes, in part, a concave provided in the mounted face of the base except in the terminal portion. Reference is directed to Figures 2 and 11. Applicants review of these figures, and corresponding passages, has revealed this particular feature. Specifically, Figure 2 and Figure 1 appear to illustrate a chip antenna that is symmetrical all the way around. Consequently, there can be no concave portion on only the mounted face of the base. Likewise, Figure 11 appears to suggest that there are no concave regions present at all on the chip antenna.

The Office Action also alleges that Yoshinomoto discloses that the depth of the concave is not more than ½ the thickness of the base. As previously discussed, however, Yoshinomoto does not disclose a concave region as set forth in independent claim 1. Consequently, it is not possible for Yoshinomoto to further disclose a concave region having a depth that is no more than ½ the thickness of the base.

Regarding the flat and rectangular conductive wire, the Office Action indicates that Yoshinomoto discloses this particular feature, and provides reference to column 3, lines 11-35. Applicants review of this passage, however, has not revealed any disclosure or suggestion for this particular feature. Rather, the cited passage appears to discuss the dimensions of the chip antenna itself. There does not appear to be any discussions of the dimensions of the rectangular conductive wire. Yoshinomoto simply fails to provide any disclosure or suggestion for various features recited in the claimed invention such as "a concave provided in the mounted face of said base except in said terminal portion," "the depth of the concave is not more than

½ of the thickness of said base" and "said flat end rectangular conductive wire is .05 to 2 mm in width and 0.05 to 0.2 mm in thickness." (Emphasis added)

It is therefore respectfully submitted that independent claim 1 is allowable over the art of record.

Claim 2 has been amended to present the subject matter previously recited in claim 4 in independent form. As noted in the Office Action this particular claim would be allowable if such amendments were made.

Accordingly, Applicants respectfully submit that claim 2 is allowable over the art of record.

Claim 3 has been amended to incorporate the subject matter previously recited in claims 1, 2, and 4. Since the limitations of claim 4 were considered to be allowable, claim 3 is also considered allowable as it includes such limitations.

It is therefore respectfully submitted that independent claim 3 is also allowable over the art of record.

Claim 4 depends from either claim 1 or claim 3, and is also believed allowable for at least the reasons set forth above with respect to independent claims 1 and 3.

Claim 12 depends from independent claim 1, and is therefore believed allowable for at least the reasons forth above with respect to independent claim 1. In addition, this claim introduces novel elements that independently render it patentable over the art of record.

IV. Rejections Under 35 USC §103

Claims 5-7 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ota and view of Clark. Regarding claim 5, the Office Action asserts that Ota discloses a chip antenna that is arranged in the vicinity of metallic functional components. The Office Action admits that Ota fails to explicitly mention

that filter circuits are connected to the power source side terminal metallic functional component. Clark is relied upon for disclosing a radio phone arrangement that includes filter circuits connected to the power source side terminal of a metallic functional component.

As amended, independent claim 5 defines a surface mount antenna device that comprises:

> a surface mount type chip antenna arranged in the vicinity of metallic functional components, and high frequency removal filter circuits connected to the power source side terminal of said metallic functional components, said high frequency removal filter circuits being capable of obstructing the resonant current of the resonance frequency of said chip antenna.

According to independent claim 5, the antenna device comprises a surface mount chip antenna that is arranged in the vicinity of metallic functional components. High frequency removal filter circuits are connected to the power source side terminal of the metallic functional components in order to obstruct the resonant current of the resonance frequency of the chip antenna. As discussed in the specification, such a configuration allows electromagnetic waves to be efficiently radiated from the antenna. See page 35, lines 20-25.

The Office Action relies on Clark for providing an arrangement that provides filter circuits in the vicinity of metallic functional components, and directs attention to Figure 6. Clark, however, does not appear to provide a high frequency removal filter circuit as set forth in independent claim 5. Rather, Clark appears to disclose a low pass filter that preconditions signals prior to the signals being input to the speaker of the radio phone device. This is intended to produce a flat response with high quality audio. See column 4, lines 31-43. Clark simply does not provide any disclosure or suggestion for providing a high pass filter. Further, Clark is not even concerned with

the problem addressed by independent claim 5 wherein resonant current of the resonance frequency of the chip antenna are blocked in order to improve electromagnetic wave efficiency of the antenna. The combination of Ota and Clark simply fails to disclose or suggest the features recited in independent claim 5.

It is therefore respectfully submitted that independent claim 5 is allowable over the art of record.

Claims 6, 7, and 13 depend from independent claim 5, and are therefore believed allowable for at least the reasons set forth above with respect to independent claim 5. In addition, these claims each introduce novel elements that independently render them patentable over the art of record.

Claims 8-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ota in view of Clark, and further in view of Yoshinomoto. Claims 8-10, however, also depend from independent claim 5. As discussed above, the combination of Ota and Clark fails to disclose various features recited in independent claim 5. In addition, the inclusion of Yoshinomoto as a tertiary reference does not remedy the shortcomings of the earlier combination.

It is therefore respectfully submitted that claims 8-10 are allowable over the art of record based at least on their dependency from independent claim 5. In addition, these claims each introduce novel elements that independently render them patentable over the art of record.

V. Conclusion

For the reasons stated above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, a Notice of Allowance is believed in order, and courteously solicited.

If the Examiner believes that there are any matters which can be resolved by way of either a personal or telephone interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

AUTHORIZATION

Applicants request any shortage or excess in fees in connection with the filing of this paper, including extension of time fees, and for which no other form of payment is offered, be charged or credited to Deposit Account No. 01-2135 (Case: 520.43633X00).

Respectfully submitted,
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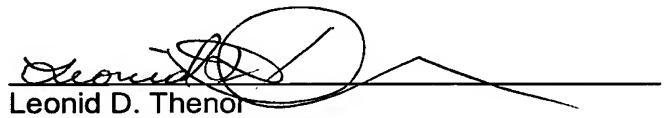

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Dated: December 30, 2005